

MAT1A Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP12704a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q00266
Other Accession	P13444 , Q91X83 , Q2KJC6 , NP_000420.1
Reactivity	Human
Predicted	Bovine, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32086
Calculated MW	43648
Antigen Region	107-136

Additional Information

Gene ID	4143
Other Names	S-adenosylmethionine synthase isoform type-1, AdoMet synthase 1, Methionine adenosyltransferase 1, MAT 1, Methionine adenosyltransferase I/III, MAT-I/III, MAT1A, AMS1, MATA1
Target/Specificity	This MAT1A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 107-136 amino acids from the N-terminal region of human MAT1A.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MAT1A Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MAT1A
Synonyms	AMS1, MATA1

Function	Catalyzes the formation of S-adenosylmethionine from methionine and ATP. The reaction comprises two steps that are both catalyzed by the same enzyme: formation of S-adenosylmethionine (AdoMet) and triphosphate, and subsequent hydrolysis of the triphosphate.
Tissue Location	Expressed in liver..

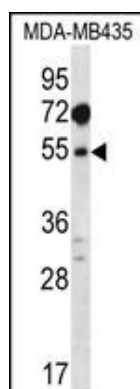
Background

This gene catalyzes a two-step reaction that involves the transfer of the adenosyl moiety of ATP to methionine to form S-adenosylmethionine and triphosphate, which is subsequently cleaved to PPi and Pi. S-adenosylmethionine is the source of methyl groups for most biological methylations. The encoded protein is found as a homotetramer (MAT I) or a homodimer (MAT III) whereas a third form, MAT II (gamma), is encoded by the MAT2A gene. Mutations in this gene are associated with methionine adenosyltransferase deficiency.

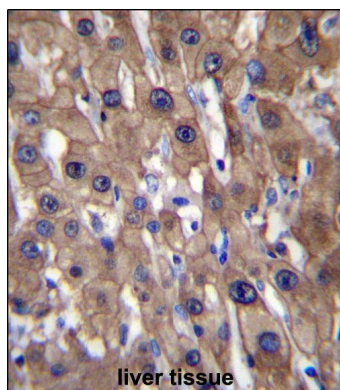
References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Wu, S.M., et al. Cell. Mol. Life Sci. 67(11):1831-1843(2010)
Lai, C.Q., et al. Am. J. Clin. Nutr. 91(5):1377-1386(2010)
Joslyn, G., et al. Alcohol. Clin. Exp. Res. 34(5):800-812(2010)
Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010) :

Images



MAT1A Antibody (N-term) (Cat. #AP12704a) western blot analysis in MDA-MB435 cell line lysates (35ug/lane). This demonstrates the MAT1A antibody detected the MAT1A protein (arrow).



MAT1A Antibody (N-term) (Cat. #AP12704a) immunohistochemistry analysis in formalin fixed and paraffin embedded human liver tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of MAT1A Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Citations

- [Glucocorticoid-induced S-adenosylmethionine Enhances the IFN Signaling Pathway by Restoring STAT1 Methylation in](#)

[Hepatitis B Virus Infected Cells.](#)

- [Hepatic metabolite profiles in mice with a suboptimal selenium status.](#)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.